



**COUNTY OF MERCER**  
McDADE ADMINISTRATION BUILDING  
640 SOUTH BROAD STREET  
P.O. BOX 8068  
TRENTON, NEW JERSEY 08650-8068

BRIAN M. HUGHES  
COUNTY EXECUTIVE

TEL: (609) 989-6518  
FAX: (609) 278-4819

December 13, 2011

Federal Communications Commission  
Public Safety and Homeland Security Bureau  
445 12<sup>th</sup> Street SW  
Washington, D.C. 20554

Re: License-WQCW645 / FRN: 000739373

Mercer County New Jersey is formally requesting a waiver of the narrowbanding date requirement based on the following information which we believe complies with the Commission's waiver standard under Section 1.925.

1. Steps already taken to plan for, initiate, and complete the transition to narrowband operations—  
*Mercer County, New Jersey is in the process of designing, purchasing and implementing a county wide public safety P25 trunked communications system in the 470 to 512 MHz band.*

*The County has retained a Consulting Engineer, has developed a plan, prepared a narrowbanding inventory (attached), is preparing and finalizing specifications for an expanded P25 Trunked Radio System, and has applied for and received a funding commitment of \$5,500,000 from the County's governing body (letter attached). Implementation is expected to progress according the following schedule:*

- *Specifications are to be completed by December 2011.*
  - *The public bid process will start during the first quarter of 2012.*
  - *Delivery, installation and optimization by selected vendor of the microwave backhaul system will be completed by the end of the third quarter of 2012.*
  - *Delivery, installation and optimization of the IP-based 10 site trunked radio communications system is projected to be completed by the first quarter of 2013*
  - *Final system acceptance is projected to be completed by the end of the second quarter of 2013.*
2. The System size and complexity—  
*The system is a 14 channel UHF system made up of 4 simulcast sites and 6 additional receive sites, which are providing a voted receive signal. The control of both the simulcast and voted receive functions is through a redundant IP-based server system linked by a microwave backhaul system. The system will be interoperable with surrounding counties through the microwave links.*

3. Describe whether system equipment is narrowband-capable or must be replaced or upgraded—  
*All new system equipment will be designed for 12.5 KHz operation and capable of being reprogrammed to 6.25 KHz. All existing retained VHF and UHF channel equipment will be retuned to 12.5 KHz where possible and replaced if not retunable. An inventory list has been prepared and is attached.*
4. Describe whether the licensee plans additional system upgrades or improvements in addition to converting to narrowband operation—  
*The licensee plans to complete a system upgrade: see above statements.*
5. Provide funding sources, including whether the licensee's budget requires government approval or a multi-year budget process—  
*The County Executive has provided the attached letter, stating that funds for the proposed radio system have been proposed in the 2012 Capital Budget, pending approval by the Mercer County Board of Chosen Freeholders.*
6. Whether the licensee's narrowbanding schedule is affected by neighboring systems due to interoperability relationships or other interdependencies—  
*No dependency*
7. Plans to minimize the negative impact of extended wideband operations on co-channel and adjacent channel operations, including a description of the spectrum environment in the affected area—  
*There is not any anticipated negative impact on co-channel and adjacent channel operations. Surrounding Counties are operating primarily in the UHF spectrum and will be narrowbanded. The NJ State Police, operating in the 800 MHz band, will be connected to the new system through an IP microwave connection.*
8. If the licensee plans to migrate to a non-VHF/UHF band (e.g., 700 MHz or 800 MHz), whether it will relinquish VHF/UHF spectrum once it has migrated and the amount of spectrum to be relinquished—  
*Provided in Item 1 above, is a proposed timetable for completion of the new system and related narrowbanding that includes the following elements of spectrum management following the migration to the new system:  
The dates specified for relinquishing frequencies are dependent on the execution of the implementation schedule. The exact dates may need to be modified based on the actual purchase and installation of the new system. As a result of the implementation of the new County trunked system, individual UHF channels are scheduled to be transferred from Police agencies to Fire agencies. This transfer will then facilitate Fire agencies to relinquish VHF channels to the public safety pool. This transfer will only take place after the County trunked system is fully operational in the County's Police agencies.*  
  
*The County will retain 154.4300 MHz for wide area paging. Equipment on this frequency will be narrowbanded during the implementation of the new P25 UHF trunked system.*

*The table below is a list of frequencies the County plans to vacate:*

Mercer Fire 2	154.2950
Mercer Tac 1	154.1750
Mercer Tac 2	154.3400
Mercer Tac 3	154.3550
Hopewell Disp	154.1300
Mercer Chiefs	154.3700
Mercer FG 1	154.4000
Mercer FG 2	154.1900
Mercer Co Fire Police	154.0450

What steps in the process have been or will be taken prior to January 1, 2013:

*All existing County UHF equipment capable of narrow banding will be completed by January 1, 2013. This equipment either will be used in the new trunked system or will be turned over to local agencies as they move from their VHF channels to the new narrowbanded UHF Conventional systems.*

Anticipated dates of commencement and completion of:

- Replacement or retuning of mobiles/portables  
*Start July 2012 with projected completion December 2012*
- Infrastructure replacement or retuning  
*Start July 2012 with projected completion December 2013*

Communities involved in the new system as it is implemented and expanded:

#### **East Windsor**

<b>Frequency</b>	<b>License</b>	<b>Alpha Tag</b>	<b>Description</b>
<b>154.02500</b>	<b>KJW326</b>	EMS Disp	EMS Dispatch & Operations
<b>460.35000</b>	<b>WPDA304</b>	PD 1 dISP	Police Dispatch
<b>460.15000</b>	<b>WPDA304</b>	PD 2	Police Tactical
<b>156.12000</b>	<b>KDO212</b>	DPW	Public Works

## Ewing Township

Frequency	License	Alpha Tag	Description
453.10000	KNEA917	EPD BU	PD Trunk System Back Up/ Special Events

## Hamilton

Frequency	License	Alpha Tag	Description
154.22000	KED409	FD 4 FG	Fireground Ops 4
154.37000	KEG513	FD Officers	Fire Officers
155.38500	KEE600	EMS Tac	Municipal EMS Tactical
453.52500	KLW340	PD 1 Disp	Police Dispatch
460.07500	KNCS282	PD 2	Police Ops 2
460.45000	KNCS282	PD 3	Police Ops 3
453.18750	WPIW453	Water/Sewr	Water & Sewer

## Hightstown

Frequency	License	Alpha Tag	Description
154.41500	KEC839	FD FG	Local Fireground
155.26500	KNFP315	EMS Ops	EMS Operations
453.70000	KVV724	PD Disp	Police Dispatch
158.74500	WPUX956	DPW	Public Works

## Hopewell

Frequency	License	Alpha Tag	Description
154.13000	KSO869	Hopewell FD	Fire Dispatch
453.37500	WPMZ799	Hopewell PD	Police Dispatch

## Lawrence

Frequency	License	Alpha Tag	Description
453.42500	WQFP264	PD 1 Disp	Police Dispatch
453.82500	KA35555	PD 2 / DPW	Police Secondary/DPW

### Pennington

Frequency	License	Alpha Tag	Description
153.89000	WPGY307	FD Tac 1	Fire Tactical 1
155.29500	WPBG752	EMS Disp	EMS Dispatch

### Princeton Borough

Frequency	License	Alpha Tag	Description
460.26250	WPMJ718	PrincetonPD	Police Dispatch
158.80500	KEI901	PrincetonES	Fire & EMS Dispatch
155.82750	WPRV636	PrincetonFAS	EMS Tactical Ops

### Princeton Township

Frequency	License	Alpha Tag	Description
453.67500	KED993	PrinceTwpPD	Police Dispatch

### Robbinsville

Frequency	License	Alpha Tag	Description
460.12500	WNPA545	Rbvl PD Disp	Police Dispatch

## Trenton

Frequency	License	Alpha Tag	Description
460.57500	KED796	TrntFD Simul	Fire TRS Simulcast

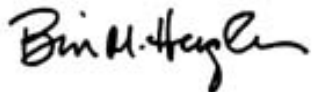
## West Windsor

Frequency	License	Alpha Tag	Description
453.32500	WPUY272	PD Disp	Police Dispatch
151.25750	WPZD895	EM Ops	Fire & EMS Operations
155.19750	WPZD895	EM Disp	Fire & EMS Dispatch

Thank you for your assistance and cooperation with Mercer County's plan to develop a spectrum efficient interoperable public safety communications system.

If you have any questions or require addition information please contact our consulting engineers at Intertech Associates, Inc.

Respectfully Submitted,



Brian M. Hughes  
County Executive



## COUNTY OF MERCER

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December 7, 2011

Federal Communications Commission  
Public Safety and Homeland Security Bureau  
445 12<sup>th</sup> Street S.W.  
Washington, D.C. 20554

Re: Narrow Band Waiver Request

To Whom It May Concern;

This will serve to support the Mercer County New Jersey request for a waiver of the January 1, 2013 date to narrow band our UHF and VHF radio channels covered by these licenses as well as others under the County's name:

WPXM651	WPKJ922
WQCW645	WNSB346
KX3866	WPRM546

Funds in the amount of \$5.5 million have been proposed in the 2012 Mercer County Capital Budget pending approval by the Mercer County Board of Chosen Freeholders. Proposed funds are for the acquisition and installation of a Countywide UHF Trunked P25 Radio system for all County agencies to be built over phases that will ultimately support public safety functions in up to 13 municipalities.

Also of serious consideration, is the extent of burden on County finances to narrow band its communications systems only to have to replace them within a year.

Based on contractor projections, the anticipated completion may extend beyond the January 1, 2013 deadline by up to 12 months. Therefore, the County of Mercer is requesting a waiver for an extension on the narrow-band deadline.

Thank you for your assistance and cooperation on this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read "B M Hughes", is written over the typed name and title.  
Brian M. Hughes  
County Executive

DEPARTMENT	Frequency Band	RIDING POS/SCBA	MOBILES	# Newer than 1997	PORTABLES	# Newer than 1997	# of Control Stations	# Newer than 1997	Console Interface	# of Repeaters/Base Stations	Make and Model	# Newer than 1997	# of Minitor 5 Pagers or newer	# of Minitor Pagers 4 or older
									y/n					

PROSECUTOR                      UHF                      29/10 trunk                      28                      129/74 trunk                      127                      2                      0                      No                      sheriff

NOTE\* Non trunking portables(51)  
to be returned to the county  
administration for reuse when  
Trunking system is finished.

NOTE\* Non trunking mobiles(18) to  
be returned to the county  
administration for reuse iwhen  
Trunking system is finished.

SHERIFF	UHF	N/A	50	10	170	170	3	0	Yes	4R - 1BS	ericson	1	N/A	N/A
OEM	UHF TRUNKING													
DOT	VHF		79		6		3							
Bridge			6											
Shade Tree			11											
Traffic/Highway	VHF		13											
TRADE	LOW BAND	N/A	34	34	1	1	1	1	No	1	Motorola - RDB4455A	1	0	0
BLDG & GROUNDS	VHF		9	0	6	0	0	0	0					
MOTOR POOL	VHF		2		10	10								
MCIA	UHF TRUNKING	N/A	6	6	2	2	3	3	No	vendor	KENW 880	11	N/A	N/A
MCCC	UHF				35	35								
AIRPORT	VHF	N/A	24	< 15	14	14	0	0	No	1 / 1	Motorola MTR2000	1	0	0
Park Commission/Rangers	UHF		39		66	66	6		No	1	Motorola GR1225 (45 watt analog)	1		
Maintenance/Golf Shops/Admin.														
Central Maintenance	VHF		10		8									
CORRECTIONS	UHF		17		109		4		Yes					
YOUTH DETENTION	UHF		4		20									
COURT SECURITY	UHF		Included w/Sheriff											
SPECIAL SERVICES School District	UHF	N/A	8	8	125	90	N/A	N/A	No		KENWOOD			
FIRE ACADEMY	VHF	N/A	3	0	15	15	0	N/A	No	0	1 TKR8510PSD N/A	YES N/A	N/A 0	N/A 0

315

530